

Appendix B

List of Planetary Community White Papers

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The Solar System Exploration (SSE) Survey has been a priority of the planetary community since its inception. In support of this study, the Division for Planetary Sciences of the American Astronomical Society (DPS/AAS), the Planetary Sciences Section of the American Geophysical Union, the Planetary Geology Division of the Geological Society of America, and the Meteoritical Society sponsored a Planetary Community Decadal Web site, created by the DPS/AAS, that included real-time online community forums and facilitated the creation of community decadal panels with self-selected membership that focused on narrow and broad areas of solar system exploration.

More than 380 scientists participated on these community panels. They identified key issues and priorities for the next decade in their areas and generated 24 white papers that were forwarded to the appropriate SSE Survey panels and Steering Group. These papers are available in a single volume, *The Future of Solar System Exploration, 2003-2013*, published by the Astronomical Society of the Pacific Conference Series.^a

In addition to these efforts, NRC SSE Survey activities were advertised on the community decadal Web site with links to agendas as available. Notification of upcoming SSE Survey activities and requests for input and community decadal updates were regularly sent out in the DPS/AAS e-mail newsletter and forwarded to the other professional societies for distribution to their members (there is substantial overlap in membership among these societies). The energy, financial resources, and time devoted by the planetary community to this process evidence the strong support for such a study and the broad desire among the community to openly discuss and set priorities to guide our future solar system exploration efforts.

TITLES AND AUTHORSHIP OF COMMUNITY WHITE PAPERS

Dust Astronomy: New Venues in Interplanetary and Interstellar Dust Research

E. Grün, P.G. Brown, A.L. Graps, J.M. Hahn, D.P. Hamilton, W.M. Harris, M. Horányi, D.L. Huestis, A.V. Krivov, M.J. Kuchner, A.C. Levasseur-Regourd, D.J. Lien, J.-C. Liou, C.M. Lisise, D.D. Meisel, W.T. Reach, M.L. Sitko, T.P. Snow, R. Srama, J.A. Stansberry, M.V. Sykes, H. Yano, and M.E. Zolensky.

^aM.V. Sykes (ed.), *The Future of Solar System Exploration, 2003-2013: Community Contributions to the NRC Solar System Exploration Decadal Survey*, ASP Conference Series Volume 272, Astronomical Society of the Pacific, San Francisco, Calif., 2002.

The Role of NASA's Planetary Sub-Orbital Program in Our Exploration of the Solar System

W.M. Harris, S.A. Stern, J.T. Clarke, and D. Slater.

Solar System Astrometry

D. Pascu, T.J. Johnson, J.R. Rohde, R.C. Stone, N. Zacharias, J.D. Giorgini, R.A. Jacobson, E. M. Standish, B.G. Marsden, and L.C. Ball.

Europa Exploration: Science and Mission Priorities

J.F. Cooper, C.B. Phillips, J.R. Green, X. Wu, R.W. Carlson, L.K. Tamppari, R.J. Terrile, R.E. Johnson, J.H. Eraker, and N.C. Makris.

Exploration of the Neptune System

H.B. Hammel, K.H. Baines, J.N. Cuzzi, I. de Pater, W.M. Grundy, G.W. Lockwood, J. Perry, K.A. Rages, T. Spilker, and J.A. Stansberry.

Probing The Solar System's Outermost Frontier: The Future of Kuiper Belt Studies

W.M. Grundy, H.F. Levison, J.W. Parker, R.L. Allen, L.C. Ball, J.F. Cooper, M.C. De Sanctis, T.L. Farnham, B. Gladman, J.M. Hahn, C.W. Hergenrother, J.J. Kavelaars, H. Krüeger, D.J. Lien, R. Malhotra, R.M.E. Mastrapa, A. Quillen, R. Srama, J.A. Stansberry, G. Strazzulla, R.J. Terrile, and C.A. Trujillo.

Planetary Atmospheres

D.L. Huestis, N.G. Adams, S.K. Atreya, K.H. Baines, R.F. Beebe, S.J. Bolton, S.W. Bouger, A. Coustenis, S.G. Edgington, A.J. Friedson, M. Galand, C.A. Griffith, S.L. Guberman, H.B. Hammel, M.D. Hofstadter, A.P. Ingersoll, J.I. Lunine, M. Mendillo, J. Moses, I. Mueller-Wodarg, G.S. Orton, K.A. Rages, T.G. Slanger, D.V. Titov, A.R. Vasavada, A.-S. Wong, and R. Yelle.

Lunar Exploration, Manned and Unmanned

P.D. Spudis, S.W. Asmar, D.B.J. Bussey, N. Duxbury, L.J. Friesen, J.J. Gillis, B.R. Hawke, G. Heiken, D. Lawrence, J. Manifold, M.A. Slade, A. Smith, G.J. Taylor, and R.A. Yingst.

Terrestrial Analogs to Mars

T.G. Farr, S. Arcone, R.E. Arvidson, V. Baker, N.G. Barlow, D. Beaty, M.S. Bell, D.D. Blankenship, N. Bridges, G. Briggs, M. Bulmer, F. Carsey, S.M. Clifford, R.A. Craddock, P.W. Dickerson, N. Duxbury, G.L. Galford, J. Garvin, J. Grant, J.R. Green, T.K.P. Gregg, E. Guinness, V.L. Hansen, M.H. Hecht, J. Holt, A. Howard, L.P. Keszthelyi, P. Lee, P.D. Lanagan, R.C.F. Lentz, D.W. Leverington, L. Marinangeli, J.E. Moersch, P.A. Morris-Smith, P. Mouginis-Mark, G.R. Olhoeft, G.G. Ori, P. Paillou, J.F. Reilly II, J.W. Rice Jr., C.A. Robinson, M. Sheridan, K. Snook, B.J. Thomson, K. Watson, K. Williams, and K. Yoshikawa.

Determinative Mineralogy: An Essential Component of Planetary Exploration

D.L. Bish, D.T. Vaniman, D.F. Blake, J.R. Green, C.T. Johnston, B.A. Kelly-Serrato, D.W. Ming, J.J. Papike, A.S. Yen, and M.E. Zolensky.

Divergent Evolution Among Earth-like Planets: The Case for Venus Exploration

D. Crisp, M.A. Allen, V.G. Anicich, R.E. Arvidson, S.K. Atreya, K.H. Baines, W.B. Banerdt, G.L. Bjoraker, S.W. Bouger, B.A. Campbell, R.W. Carlson, G. Chin, A. Chutjian, R.T. Clancy, B.C. Clark, T.E. Cravens, A.D. DelGenio, L.W. Esposito, B. Fegley, M. Flasar, J.L. Fox, P.J. Giersch, R.M. Goody, D.H. Grinspoon, S. Gulkis, V.L. Hansen, R.R. Herrick, D.L. Huestis, D.M. Hunten, M.A. Janssen, J. Jenkins, C.L. Johnson, G.M. Keating, A.J. Kliore, S.S. Limaye, J.G. Luhmann, J.I. Lunine, P. Mahaffy, P.J. McGovern, V.S. Meadows, F.P. Mills, H.P. Niemann, T.C. Owen, K.I. Oyama, R.O. Pepin, J.J. Plaut, D.C. Reuter, M.I. Richardson, C.T. Russell, R.S. Saunders, J.T. Schofield, G. Schubert, D.A. Senske, M.K. Shepard, T.G. Slanger, S.E. Smrekar, D.J. Stevenson, D.V. Titov, E.A. Ustinov, R.E. Young, and Y.L. Yung.

Instrument Technology Development

J.P. Hoffman, J.R. Piepmeier, T.L. Akins, A.C. Berkun, F. Carsey, D.R. DeBoer, W.N. Edelstein, H.B. Hammel, R.D. Lorenz, B. Macintosh, and R.A. Tucker.

The Study of Comets

M.R. Combi, M.T. Capria, G. Cremonese, M.C. De Sanctis, T.L. Farnham, Y.R. Fernandez, M.C. Festou, U. Fink, J.R. Green, W.M. Harris, C.W. Hergenrother, P.L. Lamy, S.M. Larson, H.F. Levison, D.J. Lien, C.M. Lisse, D.D. Meisel, D.T.F. Möhlmann, B.E.A. Mueller, N.H. Samarasinha, M.L. Sitko, H.A. Weaver, and P.R. Weissman.

Titan

R.D. Lorenz, J.R. Green, C.A. Wood, A. Coustenis, G.G. Ori, P. Paillou, R. Yelle, S.J. Bolton, K.H. Baines, R.J. Terrile, M.A. Gurwell, C.A. Griffith, A.-S. Wong, and K.A. Rages.

Near-Earth Objects: Discovery, Tracking, and Characterization

D.K. Yeomans, E. Asphaug, W.F. Bottke, P.G. Brown, A. Cellino, R.A. Fevig, U. Fink, C.W. Hergenrother, A.R. Hildebrand, S.M. Larson, J.-L. Margot, and D.J. Tholen.

The Future of Io Exploration

J.R. Spencer, F. Bagenal, A.G. Davies, I. de Pater, F. Herbert, R.R. Howell, L.P. Keszthelyi, R.M.C. Lopes, M.A. McGrath, M.P. Milazzo, J. Moses, J. Perry, J. Radebaugh, J.A. Rathbun, N.M. Schneider, G. Schubert, W. Smythe, R.J. Terrile, E.P. Turtle, and D.A. Williams.

Near-Earth Asteroid Sample Return

D.W.G. Sears, C.C. Allen, D.T. Britt, D.E. Brownlee, A.F. Cheng, C.R. Chapman, B.C. Clark, B.G. Drake, R.A. Fevig, I.A. Franchi, A. Fujiwara, S.P. Gorevan, H. Kochan, J.S. Lewis, M.M. Lindstrom, K. Nishiizumi, M.S. Race, D.J. Scheeres, E.R.D. Scott, G.J. Taylor, and H. Yano.

Mars: Its Place in Solar System Exploration

J.M. Moore, L.A. Leshin, D.D. Bogard, C.K. Shearer, N.G. Barlow, A.F.C. Haldemann, R.J. Wilson, B.P. Weiss, A.H. Treiman, R.N. Clark, and S.M. Clifford.

Defining Long Term Goals and Setting Priorities for Education and Public Outreach

J.A. Grier, D.H. Atkinson, N.G. Barlow, I.P. Griffin, J.P. Hoffman, B.A. Kelly-Serrato, L.P. Keszthelyi, M.J. Klein, S.L. Klug, R.A. Kolvoord, P.D. Lanagan, L.A. Lebofsky, D.J. Lien, M.M. Lindstrom, R.M.C. Lopes, L.L. Lowes, J.D. Manifold, R.M.E. Mastrapa, M.P. Milazzo, E.D. Miner, P.A. Morris-Smith, A.S. Rivkin, C.J. Runyon, A.M. Sohus, M.L. Urquhart, A.R. Vasavada, R.L. Warasila, P.G. Withers, and C.A. Wood.

The Next Giant Leap: Human Exploration and Utilization of Near-Earth Objects

T.D. Jones, D.R. Davis, D.D. Durda, R. Farquhar, L. Gefert, K. Hack, W.K. Hartmann, R. Jedicke, J.S. Lewis, S. Love, M.V. Sykes, and F. Vilas.

Mercury

A.E. Potter, R.M. Killen, and B. Hapke.

Planetary Rings

M.K. Gordon, S. Araki, G.J. Black, A.S. Bosh, A. Brahic, S.M. Brooks, S. Charnoz, J.E. Colwell, J.N. Cuzzi, L. Dones, R.H. Durisen, L.W. Esposito, C. Ferrari, M. Festou, R.G. French, S.M. Giuliatte-Winter, A.L. Graps, D.P. Hamilton, M. Horányi, R.M. Karjalainen, A.V. Krivov, H. Krüger, S.M. Larson, H.F. Levison, M.C. Lewis, J.J. Lissauer, C.D. Murray, F. Namouni, P.D. Nicholson, C.B. Olkin, F. Poulet, N.J. Rappaport, H.J. Salo, J. Schmidt, M.R. Showalter, F. Spahn, L.J. Spilker, R. Srama, G.R. Stewart, and P. Yanamandra-Fischer.

Radio Science and the Deep Space Network: Present and Future

S.W. Asmar, K. Aksnes, J.D. Anderson, J.W. Armstrong, D.H. Atkinson, J.-P. Barriot, B. Bertotti, M.K. Bird, S.J. Bolton, R. Dutta-Roy, P. Edenhofer, W.M. Folkner, B. Häusler, L. Iess, E.A. Jensen, A.S. Konopliv, E.R. Kursinski, E.A. Marouf, M. Pätzold, D. Plettemeier, N.J. Rappaport, G.M. Resch, M.A. Slade, D.E. Smith, and G.L. Tyler.

Exploring Main Belt Asteroids

M.V. Sykes, E. Asphaug, J.F. Bell, R.P. Binzel, W. Bottke, S.J. Bus, A. Cellino, P. Clark, D.R. Davis, M.C. De Sanctis, D.D. Durda, J. Emery, R.A. Fevig, U. Fink, J. Granahan, A.W. Harris, W.K. Hartmann, R. Jedicke, M. Kelley, S.M. Larson, D.J. Lien, C. Magri, S.J. Ostro, K.L. Reed, A.S. Rivkin, D.W.G. Sears, A. Storrs, D.J. Tholen, R. Walker, R. Whiteley, and H. Yano.